



# **BlackRock ESG Aware Asset Allocation Index Series Methodology**

Effective Date: May 11, 2020

PRODUCED AND MAINTAINED BY:  
BLACKROCK INDEX SERVICES, LLC

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## Introduction

The BlackRock ESG Aware Asset Allocation Indices (the “Series”) consists of four indices measuring the performance of a weighted basket of Exchange-Traded Funds (each an “ETF” and together, the “ETFs”) that invest primarily in companies or issuers exhibiting positive Environmental, Social and Governance (“ESG”) characteristics in distinct asset classes.

Each Index in the Series includes the following features:

1. The Equity Basket provides exposure to developed and emerging market equities and holds ETFs that emphasize companies exhibiting positive ESG characteristics. This is achieved through semi-annual rebalancing of the equity allocation to four equity ETFs. The index is constructed such that the relative weights of the equity ETFs at each rebalance are consistent with the relative U.S. dollar free float-adjusted index market capitalizations of each ETF’s Reference Index. The four equity ETFs are:
  - a. iShares ESG MSCI USA ETF
  - b. iShares ESG MSCI USA Small-Cap ETF
  - c. iShares ESG MSCI EAFE ETF
  - d. iShares ESG MSCI EM ETF
2. The Fixed Income Basket provides exposure to an ETF that holds U.S. dollar denominated, investment-grade bonds from issuers generally evaluated as having positive ESG practices, while exhibiting risk and return characteristics similar to those of the broad U.S. dollar-denominated investment-grade bond market. This is achieved through semi-annual rebalancing to the iShares ESG U.S. Aggregate Bond ETF.
3. Each index is rebalanced semi-annually to realign index constituent weights with pre-determined equity and fixed income allocations. The allocations reflect the unique risk profile of each index:

Index	Equity Allocation	Fixed Income Allocation
BlackRock ESG Aware Conservative Allocation	30%	70%
BlackRock ESG Aware Moderate Allocation	40%	60%
BlackRock ESG Aware Growth Allocation	60%	40%
BlackRock ESG Aware Aggressive Allocation	80%	20%

Index Constituents are comprised of iShares® ETFs which may provide liquid, transparent and cost-effective building blocks that can be used in working toward the target objectives.

## Definitions

**Business Day** – Refers to a day when the New York Stock Exchange is open for regular trading.

**Closing Price** – with respect to an Index Constituent means the closing price for such Index Constituent as reported on its Exchange, or its successor.

**Equity Allocation** – Unique to each index in the Series, a fixed weight is assigned to the Equity Basket used in index construction to scale the Equity Basket Target Weights. The Equity Allocation and Fixed Income Allocation together sum to 1.

**Equity Basket** – The Equity ETF constituents of the index.

**Equity Basket Target Weights** – Common to all indices in the Series, the Target Weight of each ETF in the Equity Basket is determined during index construction prior to scaling by the Equity Allocation. These weights sum to 1 and are observed on the Target Weight Determination Day.

**Reference Index** – The index associated with each ETF in the Equity Basket used in index construction to derive Equity Basket Target Weights from free float-adjusted index market capitalization data.

**Exchange** – Means the primary exchange on which shares of an ETF are listed.

**Fixed Income Allocation** – Unique to each index in the Series, a fixed weight is assigned to the Fixed Income Basket used in index construction to scale the Fixed Income Basket Target Weights. The Fixed Income Allocation and Equity Allocation together sum to 1

**Fixed Income Basket** – The Fixed Income ETF constituent of the index.

**Fixed Income Basket Target Weights** – Common to all indices in the Series, the Target Weight of each ETF in the Fixed Income Basket used during index construction prior to scaling the Fixed Income Allocation. These weights sum to 1.

**Index Administrator** – Means BlackRock Index Services, LLC being the entity responsible for the production and maintenance of this Methodology and the administration and calculation of the Index.

**Index Constituents** – Means each of the ETFs in the index.

**Index Pro-Forma Shares** – Unique to each index in the Series, the forward-looking shares of each ETF in the index, computed during index construction and used to determine the Index Rebalance Weights.

**Index Rebalance Weights** – Unique to each index in the Series, the weights of each ETF effective after the market close on the day prior to the Rebalance Effective Day.

**Index Scaled Target Weights** – Unique to each index in the Series, the combined Equity Basket Target Weights and Fixed Income Basket Target Weights after multiplying the Equity Basket by the Equity Allocation and the Fixed Income Basket by the Fixed Income Allocation. These weights sum to 1 and are observed on the Target Weight Determination Day.

**Index Subscriber** – Is a person or entity that purchases Index determination services from the Index Administrator and hence is the licensee of the Index.

**Index Website** – Accessed via <https://www.blackrock.com/investing/products/blackrock-index-services> (and may be updated by the Index Administrator from time to time)

**Initial Data Start Date (“IDSD”)** – 23 April 2020.

**Market Disruption Events** – Occurs when data is not sufficiently available or able to accurately and reliably represent the market or economic reality. Additional details are available upon request in the Error and Event Handling Policy document.

**Rebalance Effective Day** – One business day following the last Business Day of April and October.

**Return** – Calculated as the relative change in levels between two time periods, expressed in units of 1 (i.e., 0.01 corresponds to a 1% change).

**Target Weight Determination Day** – 5 business days prior to the last Business Day of each April and October.

**Total Return** – Total return of the index calculated using both price and income returns of constituents and assuming reinvestment of dividends back into the index.

## Index Objectives

### BlackRock ESG Aware Conservative Allocation Index

The BlackRock ESG Aware Conservative Allocation Index is designed to measure the performance of a portfolio composed of equity and fixed income iShares® ESG ETFs intended to represent a conservative risk profile with a 70% allocation to fixed income and 30% allocation to equities.

### BlackRock ESG Aware Moderate Allocation Index

The BlackRock ESG Aware Moderate Allocation Index is designed to measure the performance of a portfolio composed of equity and fixed income iShares ESG ETFs intended to represent a moderate risk profile strategy with a 60% allocation to fixed income and 40% allocation to equities.

### BlackRock ESG Aware Growth Allocation Index

The BlackRock ESG Aware Growth Allocation Index is designed to measure the performance of a portfolio composed of equity and fixed income iShares ESG ETFs intended to represent a growth risk profile with a 60% allocation to equities and 40% allocation to fixed income.

### BlackRock ESG Aware Aggressive Allocation Index

The BlackRock ESG Aware Aggressive Allocation Index is designed to measure the performance of a portfolio composed of equity and fixed income iShares ESG ETFs intended to represent an aggressive risk profile with an 80% allocation to equity and 20% allocation to fixed income.

## Index Eligibility Criteria

Each Index in the Series is composed of iShares® ETFs that are managed, distributed and sponsored by subsidiaries of BlackRock, Inc. The Index Services Governance Committee (“ISGCo”) has been established by BlackRock, Inc. to provide independent oversight of the Index Administrator in accordance with the International Organization of Securities Commissions Principles on Financial Indexes (“IOSCO Principles”).

The iShares® ETFs comprising the Index are:

#### Equity Basket ETFs (each an “Equity ETF” and together the “Equity ETFs”)

- ESGU – iShares ESG MSCI USA ETF
- ESML – iShares ESG MSCI USA Small-Cap ETF
- ESGD – iShares ESG MSCI EAFE ETF
- ESGE – iShares ESG MSCI EM ETF

#### Fixed Income Basket ETFs (each a “Fixed Income ETF” and together the “Fixed Income ETFs”)

- EAGG – iShares ESG U.S. Aggregate Bond ETF

## Index Construction

Each index rebalances semi-annually with new constituent weights taking effect after the market close on the last business day of April and October. These new weights are generated according to the index construction rules described in this section.

The index construction process results in:

1. Aligning the Equity ETF weights and Fixed Income ETF weights with the Equity Allocation and Fixed Income Allocation stated in Table 1 below
2. Setting the relative weights within the Equity Basket to mirror the relative free float-adjusted index market capitalizations, expressed in U.S. dollars, of the ETF Reference Indices. See Table 2 for the Reference Indices.

## Equity and Fixed Income Allocations

Each index in the Series targets a unique level of exposure to equity and fixed income. The ESG Aware index and its corresponding Equity and Fixed Income Allocation is set forth in Table 1.

Index	Equity Allocation	Fixed Income Allocation
BlackRock ESG Aware Conservative Allocation	30%	70%
BlackRock ESG Aware Moderate Allocation	40%	60%
BlackRock ESG Aware Growth Allocation	60%	40%
BlackRock ESG Aware Aggressive Allocation	80%	20%

Table 1. Equity and Fixed Income Allocations

## Equity ETF Reference Indices

Each Equity ETF is associated with the Reference Index set forth in Table 2. The Reference Index corresponds to the parent index of each ETF's benchmark.

ETF Ticker	ETF	Reference Index
ESML	iShares ESG MSCI USA Small-Cap ETF	MSCI USA SMALL CAP Index
ESGU	iShares ESG MSCI USA ETF	MSCI USA Index
ESGD	iShares ESG MSCI EAFE ETF	MSCI EAFE Index
ESGE	iShares ESG MSCI EM ETF	MSCI Emerging Markets Index

Table 2. Equity Basket Reference Indices

## Index Construction Steps

In advance of each Rebalance Effective Day, the index is constructed according to the following steps:

### Step 1. Compute Equity Basket Target Weights and Fixed Income Basket Target Weights

- Equity Basket Target Weights are determined using the free float-adjusted Index Market Capitalizations of each ETF's Reference Index.
- The single fixed income ETF is assigned the Fixed Income Basket Target Weight of 1.

### Step 2. Compute Index Scaled Target Weights

- Scale the Equity and Fixed Income Basket Target Weights by the Equity and Fixed Income Allocations, respectively.

### Step 3. Calculate Index Pro-Forma Shares

- Convert Index Target Weights into Index Pro-Forma Shares using the ETF closing prices as of the Target Weight Determination Day.

### Step 4. Compute Index Rebalance Weights

- After the market close on the business day immediately prior to the Rebalance Effective Day, convert Index Pro-Forma Shares into Index Rebalance Weights. The Rebalance Weights are applicable to the index calculation on the Rebalance Effective Day.

## Index Construction Step Details

### Step 1.

#### a) Equity Basket Target Weights

Compute Equity Basket Target Weights using the market capitalization of each Equity ETF's Reference Index on the Target Weight Determination Day.

- For each ETF in the Equity basket, calculate the ETF's weight:

$$w_i^{EQ}(t) = \frac{m_i^{RI}(t)}{\sum_{i=1}^n m_i^{RI}(t)}$$

Where:

$w_i^{EQ}(t)$ : is the Equity Basket Target Weight for the  $i^{th}$  Equity Basket ETF

$m_i^{RI}(t)$ : is the free float-adjusted index market capitalization, expressed in U.S. dollars, for the Reference Index of the  $i^{th}$  ETF as of the Target Weight Determination Day

$n$ : is the number of ETFs in the Equity Basket

$t$ : is the Target Weight Determination Day

## b) Fixed Income Basket Target Weights

Compute Target Weights for all ETFs in the Fixed Income Basket.

1. Assign the entire Fixed Income Basket Weight to the single Fixed Income ETF:

$$w^{FI} = 1$$

Where:

$w^{FI}$ : is the Fixed Income Basket Target Weight for the Fixed Income ETF

## Step 2.

### a) Index Scaled Target Weights

Compute Index Scaled Target Weights by scaling the Equity Basket Target Weights and Fixed Income Basket Target Weights by the Equity Allocation and Fixed Income Allocation, respectively.

1. For each Index  $j$  in the Series, compute the Index Scaled Target Weights for each ETF in the Equity Basket:

$$w_{i,j}^{S,EQ}(t) = a_j^{EQ} * w_i^{EQ}(t)$$

Where:

$w_{i,j}^{S,EQ}(t)$ : is the Index Scaled Target Weight for the  $i^{th}$  Equity ETF and the  $j^{th}$  Index

$w_i^{EQ}(t)$ : is the Equity Basket Target Weight for the  $i^{th}$  ETF

$a_j^{EQ}$ : is the Equity Allocation for the  $j^{th}$  index in the Series, as set forth in Table 1

$t$ : is the Target Weight Determination Day

2. For each Index  $j$  in the Series, compute the Index Scaled Target Weight for the Fixed Income ETF:

$$w_j^{S,FI} = a_j^{FI} * w^{FI}$$

Where:

$w_j^{S,FI}$ : is the Index Scaled Target Weight for the Fixed Income ETF and the  $j^{th}$  Index

$w^{FI}$ : is the Fixed Income Basket Target Weight for the Fixed Income ETF

$a_j^{FI}$ : is the Fixed Income Allocation for the  $j^{th}$  index in the Series, as set forth in Table 1

3. Together,  $w_{i,j}^{S,EQ}$  and  $w_j^{S,FI}$  compose the Index Scaled Target Weights  $w_j^S$  for each index  $j$ .

## Step 3.

### a) Index Pro-Forma Shares

Convert Index Scaled Target Weights into Index Pro-Forma Shares using the closing price of each ETF on the Target Weight Determination Day.

1. For each Index  $j$  in the Series, compute the Index Pro-Forma Shares:

$$s_{i,j}^{PF}(t) = \frac{w_{i,j}^S(t)}{p_i(t)}$$

Where:

$s_{i,j}^{PF}(t)$ : is the Index Pro-Forma Shares for the  $i^{th}$  ETF and the  $j^{th}$  Index

$w_{i,j}^S(t)$ : is the Index Scaled Target Weight for the  $i^{th}$  ETF and the  $j^{th}$  Index

$p_i(t)$ : is the closing price of the  $i^{th}$  ETF on the Target Weight Determination Day

$t$ : is the Target Weight Determination Day

2. In the five Business Day period starting from the Target Weight Determination Day to one business day prior to the Rebalance Effective Day, Index Pro-forma Shares are adjusted to reflect ETF Share splits (see the Maintenance & Publication section for details), as needed.

## Step 4.

### a) Index Rebalance Weights

After market close on the last Business Day of April and October, convert Index Pro-Forma Shares into Index Rebalance Weights using the closing price of each ETF on that day.

1. For each Index  $j$  in the Index Series, compute the Index Rebalance Weights:

$$w_{i,j}^R(t) = \frac{s_{i,j}^{PF\_Adj}(t) * p_i(t)}{\sum_{i=1}^n s_{i,j}^{PF\_Adj}(t) * p_i(t)}$$

Where:

$w_{i,j}^R(t)$ : is the Rebalance weight for the  $i^{th}$  ETF and the  $j^{th}$  Index, calculated after market close on day  $t$ , and applicable to the index calculation on the Rebalance Effective Day

$s_{i,j}^{PF\_Adj}(t)$ : is the Index Pro-Forma Shares for the  $i^{th}$  ETF and the  $j^{th}$  Index, as determined on the immediately preceding Target Weight Determination Day and adjusted for ETF Share splits as described in Step 3

$p_i(t)$ : is the closing price of the  $i^{th}$  ETF one business day prior to the Rebalance Effective Day

$n$ : is the number of ETFs in the Index

$t$ : is one business day prior to the Index Rebalance Effective Day

For index  $j$ , the Rebalance Weights  $w_{i,j}^R(t)$  is the opening weights for the index return calculation on the Rebalance Effective Day.

## Data Sources

Data Provider	Data
Refinitiv	ETF Prices, Returns and cash dividends
MSCI	Reference Index free float-adjusted index market capitalization

## Index Maintenance & Publication

The inception date of the Index is May 11, 2020, when the base Index level was set to 1000. Index values are calculated once every Business Day at the close of the applicable Business Day.

The Index value is calculated in U.S. dollars and published to the second decimal place.

**ETF Dividends** – The Index assumes ETF dividends are reinvested back into the index such that index constituent weights remain unchanged. Dividend reinvestment occurs after the close of trading on the ex-dividend date.

**ETF Share Split** – Index shares are multiplied by the split factor. Price is divided by the split factor.

## Index Rebalance Timeline

Index Pro-Forma Shares are computed semi-annually in advance of each Rebalance and made available to subscribers on the first business day following the Target Weight Determination Day. Rebalance Weights are calculated and take effect after market close one business day prior to the Rebalance Effective Day.

For the six-month period after each Rebalance, changes in ETF prices cause Index constituent weights to drift. Index constituent weights are realigned with a new set of Index Rebalance Weights at the next semi-annual rebalance.

## Index Calculations

Each Index is calculated on each business day based on the Total Return of the constituents:

$$R^{TR}(t) = \sum_{i=1}^n \left[ \left( \frac{P_i(t) + D_i(t)}{P_i(t-1)} - 1 \right) \times W_i(t-1) \right]$$

where:

$R^{TR}(t)$	= Total return from close of day $t - 1$ to close of day $t$
$n$	= Number of ETFs in the index
$P_i(t)$	= Closing Price of the $i^{th}$ ETF at close of day $t$ , as provided by the Data Source
$D_i(t)$	= Gross cash dividends of the $i^{th}$ ETF on day $t$ , as provided by the Data Source
$P_i(t - 1)$	= Closing Price of the $i^{th}$ ETF at close of day $t - 1$ , as provided by the Data Source
$w_i(t - 1)$	= Weight of the $i^{th}$ ETF after the close on day $t - 1$
$t$	= Business Day on which the Index is calculated

The Index level for a given Business Day will be computed and published after market close using the following formula:

$$Index(t) = (1 + R^{TR}(t)) * Index(t - 1)$$

In the event of half trading days, the Index level will be calculated in the same way as a full trading day where the Closing Price is used.

All indices in the Index Series are calculated in U.S. dollars.

## Governance

For additional Governance and Methodology details including usage and licensing opportunities for the BlackRock Indices, please contact [BLKIndexServices@blackrock.com](mailto:BLKIndexServices@blackrock.com).

## Appendix

**1. New York Stock Exchange** - The Indices will follow the schedule which can be obtained on <https://www.nyse.com/markets/hours-calendars>.

### 2. Index Methodology Changes

The indices follow a rules-based methodology and more details pertaining to Methodology Changes can be made available upon request.

### 3. Error Correction Process

The Error and Event Handling Policy can be made available upon request.

### 4. Market Disruption Events

The Error and Event Handling Policy can be made available upon request.

### 5. Index Complaints

Complaints can be submitted, which seek clarity or proposed action relating to

- Index determination process
- Application of the methodology
- Market conditions or other changes impacting the index strategy

Complaints regarding the index must be submitted via email to [BLKIndexServices@BlackRock.com](mailto:BLKIndexServices@BlackRock.com)

The complaint must include the:

1. The name of the Index;
2. The date of the issue;
3. A detailed description of how the issue impacts the Index;
4. Suggested turnaround time to resolve the issue to denote the priority of the matter.

## 6. Index Cessation

Index Cessation Policy can be made available upon request

## Disclaimer

The BlackRock ESG Allocation Indices (The "BlackRock Indices") commenced ongoing calculation on **May 11, 2020**. BlackRock Index Services, LLC ("Index Services"), a subsidiary of BlackRock, Inc. designs, sponsors and publishes the BlackRock Indices for use in portfolio benchmarking, and portfolio management. The BlackRock Indices, allocations and data are subject to change.

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